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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,767	01/10/2002	Mark Andrew Mattox	049322-0104	8331

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EXAMINER

MARKOFF, ALEXANDER

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 12/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/044,767

Applicant(s)

MATTOX, MARK ANDREW

Examiner

Alexander Markoff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/1/03 and 11/6/03 have been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because it is not clear how can an oil pipeline be cleaned by adding the composition to a dry gas pipeline.

The term "said dry gas pipeline" in claims 9 and 13 lacks proper antecedent basis.

This term is introduced into the claims by the last amendment, but is not underlined. It is believed that this is due a clerical mistake and for the examination purposes the claims have been interpreted as reciting "said oil pipeline".

However, clarification is requested.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The applicants filed a Declaration of Prof. Valente.

The Declaration states (paragraph 10) that only tris (hydroxymethyl) phosphine (TRIS, according to the Declaration) is responsible for complexing iron compounds and that THPS is incapable of complexing.

This evidences that the pending claims recite a method, which is not enabled.

The Declaration states that the composition prepared by dissolving THPS and ammonium chloride in water would comprise TRIS, THPS and TRIS oxide. See paragraphs 5 and 9.

This contradicts to the specification, which states that the composition is a mixture of THPS, ammonium chloride and water. See pages 2-3.

Thus, it is appears that either both the claims and the specification not enabled, or the invention is not described with correspondence with the requirements of 35 USC 112.

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It is noted that WO 02/08127 states (page 2) that tetrakis(hydroxymethyl) phosphonium salts (THP salts, according to the document), such as THPS, are stable only under acidic conditions and that at pH above 3 they are converted to tris(hydroxymethyl)phosphine (THP, according to the document). The document further teaches that THP reacts with ammonia to form insoluble polymer. The document further states that the composition of tetrakis(hydroxymethyl) phosphonium salts and ammonia salts is stable only at pH below 4, release THP and ammonia, which form complex with metals at pH above 5 and that polymerization takes place at pH above 6. See page 3, lines 1-14.

It is further noted WO 00/21892 teaches that the compositions of tetrakis (hydroxymethyl) phosphonium salts and ammonium salts are stable only at sufficient acidic pH and require pH 5 and above for complexing iron sulfide. See pages 1 and 5.

The combined teachings of the Declaration and both WO documents further evidence that the pending claims are not enabled. It appears that at least some additional conditions and/or reagents are required. However, no such conditions, reagents, or essential method steps are recited by the claims.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 7, 9, 10, 17 and 22 of copending Application No. 10/218,905. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application in combination disclose the limitations of the pending claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-16 have been considered with the following results.

Rejections of claims made under 35 USC 112 (2) made in the previous Office action have been withdrawn in view of the amendments.

The rejection made under 35 USC 102(e) over Chartier et al is withdrawn in view of the amendments and evidence presented by the applicants.

The rejection made under 35 USC 103 is withdrawn in view of the amendment.

However, the claims are not in conditions for allowance because of the Double Patenting rejection. See rejection above.

The claims are also rejected under 35 USC 112(1) because the applicants filed an evidence that claimed method is not enabled to remove iron sulfide. See the detailed explanation above.

The examiner would like to note that Larsen teaches complexing iron sulfide from samples containing oil and the iron sulfide by an aqueous composition of THPS and ammonium chloride under anaerobic conditions. See pages 13-17, especially page 16.

No rejection based on this reference is made because the applicants provided a Declaration showing that not THPS, but THP (TRIS, according to the declaration) is needed to complex iron sulfide.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on 703-308-4333. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7718.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703--308-0651.



Alexander Markoff  
Primary Examiner  
Art Unit 1746

am

ALEXANDER MARKOFF  
PRIMARY EXAMINER